

REMARKS**Allowable Subject Matter**

The Office Action points out at page 3 that claims 11-13, although objected to as being dependent upon a rejected independent claim, would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As noted below, claims 11 and 13, and their intervening claims, have been incorporated into claim 1, and new independent claim 14, respectively. According, it is believed that claims 1 and 14, now which include the limitations of allowable claims 11 and 13, respectively, and their dependent claims, represent allowable subject matter.

Introductory Remarks

Claims 1-13 were pending before the Office. By this submission, claims 1, 7 and 12 have been amended and claims 2-6, 9-11 and 13 have been canceled, without prejudice. Claims 14-16 have been added. Specifically, claim 11, indicated as being allowable if rewritten in independent form, has been canceled, along with its intervening claims 9 and 10, the limitations each of which have been incorporated into claim 1. Claim 2 has been canceled due to redundancies as compared to claim 9. New claim 14 has been added, which tracks amended claim 1, except that the final wherein clause of claim 1 has been replaced with the subject matter of allowed claim 13.

The amendments have been made solely to claim more fully the invention or to clearly recite what Applicants regard as the invention and/or to expedite prosecution of the present application and should in no way be construed as an acquiescence to any of the Examiner's rejections in the Office action issued in the present application. Applicants reserve the right to pursue claims as originally filed or similar claims in one or more subsequent applications.

Support for the amendments can be found throughout the application, including the specification, examples and claims, as originally filed.

In view of the amendments above and the remarks below, reconsideration is respectfully requested.

The Rejections Under 35 U.S.C. § 112, Second Paragraph, Are Overcome

Claims 1-13 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner rejected the claims for the phrases “adapted to” and/or “adapted for,” which according to the Office Action, introduce ambiguity and confusion because it is alleged to be unclear how a structure can be adapted to or adapted for a function. Additionally, the claims have been rejected under this Section for the phrase “being configured,” which according to the Office Action, fails to ascertain the claimed invention with precision. Applicants disagree with the rejection.

However, without acquiescing to the rejection and in order to expedite prosecution, Applicants have amended the claims to delete the language in question, thereby obviating these Section 112 rejections.

At least in view of the above, Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, second paragraph.

The Rejections Under 35 U.S.C. § 103 Are Overcome

Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over German Patent No. DE 2632910 to Brand et al. (hereinafter “Brand”) or U.S. Patent No. 4,437,316 to Dyer et al., (hereinafter “Dyer”), with or without U.S. Patent No. 3,763,020) to Drew et al. (hereinafter “Drew”). Applicants disagree with the rejection and traverse.

As the Office will appreciate, *Graham v. John Deere Co.*, 338 U.S. 1, 148 USPQ 459 (1966), was reaffirmed by *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 82 USPQ2d 1385 (2007) as providing the correct analytical framework for determining obviousness. Under *Graham*, obviousness is a question of law based on underlying factual inquiries that address (1) the scope and content of the prior art, (2) the differences between the claimed invention and the prior art, and (3) the level of ordinary skill in the pertinent art. Additionally, the Supreme Court in *KSR* required a “clear articulation of the reason(s) why the claimed invention would have been obvious” and that such reason “supporting a rejection under 35 U.S.C. 103 should be made explicit.”

The Examiner argues that the combination of references is proper because their exists some teaching, suggestion, or motivation in the prior art that would have led the skilled artisan to STM 289800.1

modify or combine cited prior art to arrive at claimed invention. For the obviousness rejections to be proper, the prior art references or their combination must be shown to **teach or suggest all the claim limitations**. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). In addition, for the rejection to be proper under the rationale used by the Office, there must be some teaching, suggestion or motivation to combine the references to achieve the claimed invention, and a finding of a reasonable expectation of success.

Here, the obviousness rejection cannot stand because the prior art references cited by the Examiner, taken each alone or in any combination, do not teach or fairly suggest all of the claim limitations.

Brand discloses a multistage evaporation system. Fig. 2 shows a split type evaporator 42, 43, 44 having two evaporator heating devices 42, 43 connected to a common separator 44. The heating device 42 is heated by fresh steam (as opposed to process waste steam) through line 50. The second heating device 43 is heated by product vapors from separator 44 via mechanical compressor 53. Since separator 44 is common to both the heating device 42 and the heating device 43, the mechanical compressor 53 only compresses a part of the product vapors, the rest is supplied to the heating device 24 of a second stage evaporator without being compressed by compressor 53.

Dyer discloses an evaporation system including a first evaporator 292 and a vapor compression stage 312, 346. The vapor compression stage is connected to a product vapor exit of the first evaporator and supplies compressed vapor to a second evaporator 270 to heat the second evaporator.

In contrast to Brand and Dyer, amended claim 1 recites an evaporation system in a processing plant processing a product and supplying process waste steam. The system includes an evaporator for concentrating the product at a given dew point temperature. The evaporator has an exit for product vapor and is configured to be heated by process waste steam supplied by the processing plant. A process stage is adapted to be heated to a defined temperature by product vapors of the evaporator. A vapor compression stage is connected to the product vapor exit of the evaporator and to the process stage. The vapor compression stage lowers the given dew point temperature of the evaporator below the defined temperature required for heating the process stage and raises the temperature of the product vapor to the defined temperature by compressing the product vapor.

In addition, claim 1 has been amended to include the limitations of allowed claim 11, and its intervening claims, 9 and 10, none of which are taught or suggested by the cited prior art, taken alone or in any combination. Specifically, amended claim 1 further recites that the process waste steam supplied by the processing plant is superheated process waste steam. The system of claim 1 further includes saturated process steam generating means for generating saturated process waste steam from superheated process waste steam without condensation by adding water or condensate thereto. The saturated process steam generating means comprises a wet washer purifying the superheated process waste steam and converting the superheated process waste steam in a condensation-free manner into purified saturated process waste steam to be supplied to the evaporator. Further, the claimed system forms a process waste steam route from a drier through the wet washer, a heating space of the evaporator and a waste steam outlet line of the evaporator to a waste steam chimney and wherein a delivery pump is arranged in the process waste steam route. Neither Brand nor Dyer, either alone or when combined, do not teach or suggest the above features.

Similarly, in contrast to Brand and Dyer, new claim 14 recites those same features of claim 1, except that the last wherein clause of claim 1 is replaced by the features of allowed claim 13. Accordingly, the claimed system of claim 14 includes at least one evaporator in fluid communication with the wet washer for feeding condensate of the at least one evaporator to the wet washer for the saturation and purification of the superheated process waste steam. Likewise, neither Brand nor Dyer, either alone or when combined, do not teach or suggest the above features.

Accordingly, it is respectfully submitted that Brand and Dyer, whether considered alone or in combination, do not teach, suggest, or disclose each and every element recited in amended claim 1 or new claim 14 because each of these claims, at a minimum, includes those features of claims 11 or 13, respectively, which have been determined by the Office as containing allowable subject matter over the cited prior art.

Applicants note that while the Office Action lists Drew apparently as a secondary reference, no remarks are provided by the Office as to how Drew is applied. Nevertheless, Applicants respectfully submit that the Office's conclusion that claims 11-13 are allowable necessitates that those claims are also allowable over Drew. Because the features of claims 11

and 13, and their intervening claims, are now incorporated as elements of claims 1 and 14, the claims 1 and 14 are also allowable over Drew.

Claims 7-8 and 12 depend from amended claim 1 and claims 15-16 depend from new claim 14. Because dependent claims necessarily include all of the elements recited in their corresponding independent claims, Brand and Dyer, with or without Drew, and whether taken alone or in any combination, do not anticipate or render obvious any of the pending claims of this application, for at least the reasons provided above.

Based on the foregoing remarks, it is respectfully submitted that the rejections under 35 U.S.C. § 103(a) have been overcome. Applicants respectfully request reconsideration and withdrawal of the Section 103 rejections.

CONCLUSION

In view of the amendments and remarks above, it is respectfully submitted that the rejections and objections have been overcome. It is submitted that this response is timely filed and is fully responsive. It is respectfully requested that a Notice of Allowance be issued at the Examiner's earliest opportunity. If the Examiner believes any outstanding issues can be resolved by telephone, it is requested that Applicant's representatives be contacted at the number provided below.

It is believed that there are no fees due in connection with this submission. The Director is hereby authorized to charge any deficiency or credit any overpayment in the fees to our Deposit Account No. 04-1105 under Order No. 65736(49338).

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Respectfully submitted,

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